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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,198	07/30/2001	Ilya Perlov	2862/D01/ATD/ATD/BG	3391

7590 06/13/2002

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EXAMINER

KEENAN, JAMES W

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 06/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/918,198

Applicant(s)
Perlov et al

Examiner
James Keenan

Art Unit
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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 1, the recitation of "adjacent vertical columns" lacks antecedent basis; the claim should apparently depend from claim 15.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 6, 11, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Murata et al (US 5,628,604).

Murata et al show a cassette storage and conveying system, including shelves 1G and a cassette mover 10 for carrying a cassette between the shelves and a docking station 20/50, the mover comprising an unlabeled support member (see col. 2, lines 11-14) and an end effector 19.

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Re claim 2, since the system is part of a cleanroom environment, the shelves are considered to be "positioned adjacent a cleanroom wall", as broadly claimed.

Re claim 4, the shelves and support member are considered to be supported by a "frame", absent any structural limitations of the term.

5. Claims 1-4, 6-7, 11, 14-15, and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwai et al (US 5,562,383).

See the figures 11-18 embodiment. Broad limitations are treated in the same manner noted above with respect to the Murata et al reference.

Re claim 7, note slider 146 and vertical guide 145.

6. Claims 1-4, 6-8, and 11-18 are rejected under 35 U.S.C. 102(a) as being anticipated by Fosnight (WO 98/46503).

Fosnight shows a wafer cassette storage apparatus including storage shelves 106 positioned above docking stations 104 (claim 2) adjacent a cleanroom wall (claim 3), cassette movers 116 each including support member 124b and an end effector 120, and frame 114 supporting the shelves and support members (claim 4).

Re claim 6, since this claim depends from claim 1 separately from claim 4, the frame is considered to be rail 126b.

Re claim 7, note first slider 121 and vertical guide 122.

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Re claim 8, note second slider 124a and horizontal guide 126a.

Re claim 12, note figure 11.

Re claim 13, note figure 13.

Re claim 16, note vertical channel 112.

Re claim 17, a wafer transfer robot in each processing tool 102 is considered inherent.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fosnight.

Fosnight does not show the frame to fit below the docking stations. However, it is disclosed that the panels may be mounted to the floor or ceiling.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the apparatus of Fosnight by positioning the frame substantially below the docking stations, such as by mounting it to the floor, as this is implicit in the reference and would be a simple design expediency, the use of which would work equally well in the apparatus of Fosnight.

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Re claims 9-10, Fosnight discloses that the drive mechanism for powering the first and second sliders along the respective guides may be a motor and a power transmission mechanism, such as a gear or chain assembly, but does not specifically disclose first and second lead screws.

Nevertheless, it would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the apparatus of Fosnight by utilizing lead screws for moving the sliders along the guides, as the examiner takes Official Notice that lead screws are simply a well known and art recognized type of geared power transmission mechanism, the use of which in the apparatus of Fosnight would neither require undue experimentation nor produce unexpected results.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Keenan whose telephone number is (703) 308-2559. The fax phone number for the organization where this application or proceeding is assigned is 305-7687. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1113.

jwk
June 11, 2002


JAMES W. KEENAN
PRIMARY EXAMINER